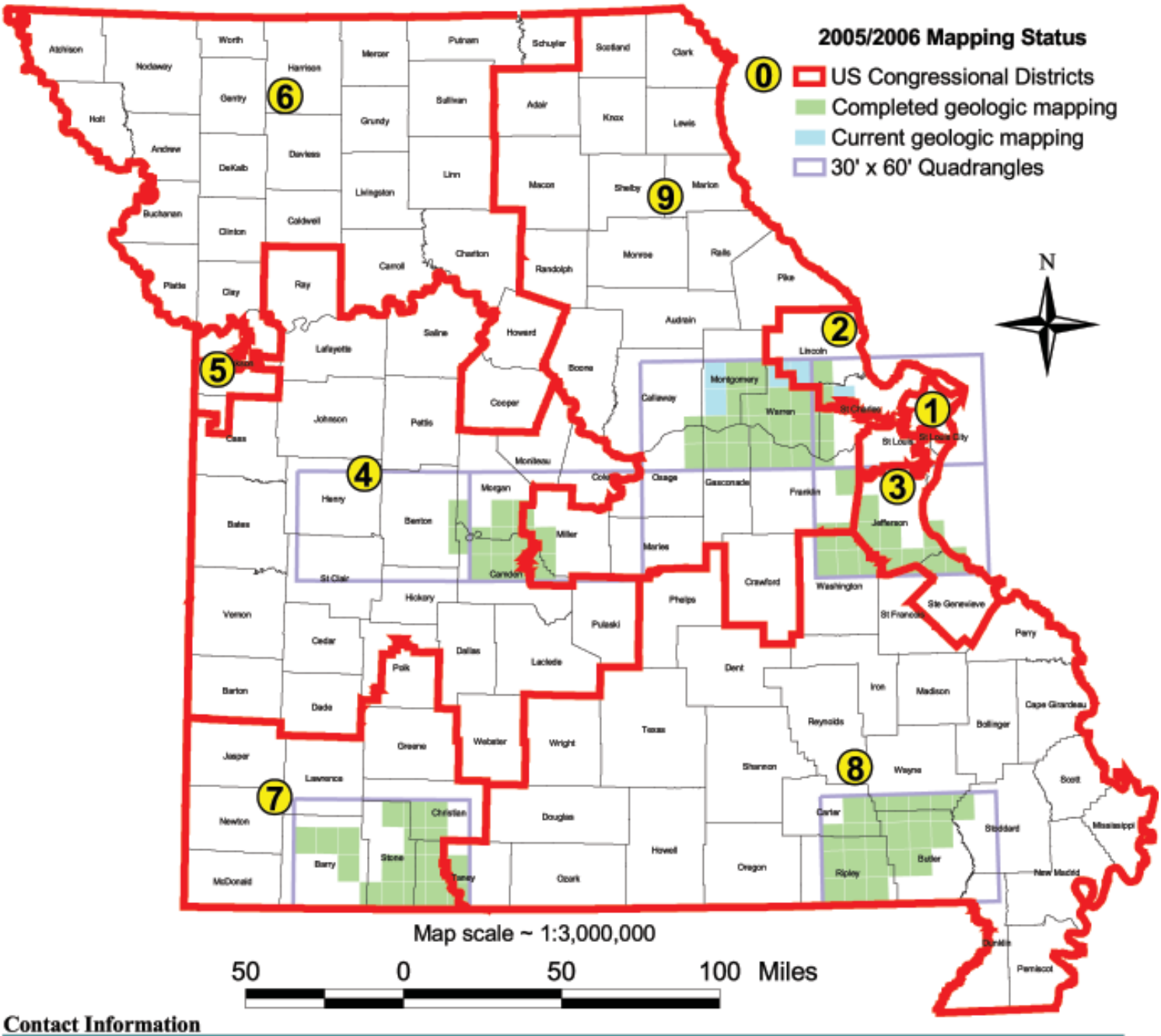
National Cooperative Geologic Mapping Program

STATEMAP Component: States compete for federal matching funds for geologic mapping

MISSOURI



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STATUS OF STATEMAP GEOLOGIC MAPPING PROGRAM IN MISSOURI –2005/2006

Year	Project Title	Federal Dollars	State Dollars	Project Dollars
93-98	**Table Rock Lake Mapping Project**: Purdy, McDowell, Lampe, Table Rock Dam, Viola, Garber, Reeds Spring, Branson, Hollister, Mincy, Forsyth, Shell Knob, Day, Highlandville, Hurley, Jenkins, Selmore & Spokane 7.5' quads	$ 319,395	$ 320,069	$ 639,464
98-00	**Poplar Bluff Mapping Project**: Briar, Doniphan North, Doniphan South, Ellsinore, Fairdealing, Flatwoods, Grandin, Grandin Southwest, Harviell, Hendrickson, Hogan Hollow, Hunter, Oxly, Poplar Bluff, Poynor, Puxico, Rombauer, Stringtown, Wappapello & Williamsville 7.5' quads **Table Rock Lake, Missouri, 30' x 60' quad compilation**	202,545	239,224	441,769
00-02	**Festus Mapping Project**: Bloomsdale, Cedar Hill, Cyclone Hollow, Danby, De Soto, Ebo, Fletcher, Gray Summit, Halifax, Old Mines, Richwoods, Selma, Tiff & Vineland 7.5' quads **Lake of the Ozarks Mapping Project**: Bagnell, Barnumton, Bollinger Creek, Camdenton, Green Bay Terrace, Lake Ozark, Sunrise Beach & Toronto 7.5' quads **Festus Digitizing Project**: Belew Creek, Festus, Herculaneum, House Springs, Lonedell, Maxville, Moselle, Oakville, Pacific, St. Clair & Valmeyer 7.5' quads (Supplemental projects are included in funding amounts) **Springfield, Missouri, 30' x 60' quad compilation**	308,232	295,234	603,466
02-03	**Fulton Mapping Project**: Berger, Dissen, Fredicksburg, Gasconade, Hermann, Marthasville, Morrison, New Haven, Pershing, Swiss, Treloar & Washington West 7.5' quads **Lake of the Ozarks Mapping Project**: Boylers Mill, Gravois Mills, Knobby & Rocky Mount 7.5' quads	227,313	227,313	454,626
03-04	**Fulton Mapping Project** (bedrock & surficial material with drilling assistance): Foristell, New Melle, Troy, Washington East, Warrenton & Wright City 7.5' quads (Supplemental projects are included in funding amounts)	255,220	272,070	527,290
04-05	**Fulton Mapping Project** (bedrock and surficial material with drilling assistance): Bellflower South, Hawk Point, Jonesburg, New Florence, Pinnacle Lake & Warrenton Northeast 7.5' quads	189,977	189,977	379,954
05-06	**Fulton Mapping Project** (bedrock mapping): Americus, Hawk Point, Montgomery City & Warrenton Northeast 7.5' quads; (surficial material mapping with drilling assistance): Americus & Montgomery City 7.5' quads **St. Louis Mapping Project** (surficial material mapping with existing data): Wentzville 7.5' quad	144,547	144,547	289,094
	TOTALS	$1,647,229	$1,688,435	$3,335,664

The Missouri Division of Geology and Land Survey (DGLS) is an active participant in the STATEMAP component of the National Cooperative Geologic Mapping Program, having participated since STATEMAP's inception in 1993. Missouri recognizes the importance of geologic mapping as a tool for land-use planners, emergency-management officials, developers, environmental agencies, mining companies, water-well drillers, and many others who have need to understand the nature, composition, and distribution of earth materials.

Several areas of rural Missouri have undergone rapid growth in recent years. The unique beauty of the Ozarks has drawn thousands of tourists and new homeowners to the Branson, Springfield and Lake of the Ozarks regions. The rapid development in these areas taxes natural resources and potentially impacts environmental quality. This has created a need for accurate geological information, and the Missouri Geologic Mapping Advisory Committee has responded by targeting geologic mapping efforts in these areas. The mapping identifies geologically sensitive areas, such as karst areas that could be particularly susceptible to groundwater contamination. Geologic mapping also identifies areas of high-quality groundwater resources to guide the installation of water wells and identifies potential mineral and aggregate resources to support economic development.

Geologic mapping has also been focused in portions of southeast Missouri where geologic hazards are associated with the New Madrid Seismic Zone. Accurate geologic information is an essential tool in the preparation of earthquake-risk maps for use in the proper siting of new buildings, bridges, waste-disposal facilities, and dams. Mapping in both the Poplar Bluff and Festus areas has been completed to optimize safe growth and minimize risks from sinkhole collapse, liquifaction, and landslides associated with earthquake hazards. Current mapping on the Fulton project area west of St. Louis also targets areas susceptible to geologic hazards and rapid population growth.

Since Missouri began its participation in the STATEMAP program, it has completed 86 bedrock and 80 surficial material maps at a scale of 1:24,000. During its thirteen-year involvement in the STATEMAP program, Missouri has received approximately $1,647,000 in Federal dollars that were matched with additional State funds. With continued cooperative effort between the United States Geological Survey and the Missouri Department of Natural Resources, the state will have reliable geologic mapping information to assist decision makers with difficult resource choices and planning efforts.

Attachment E

STATEMENT OF OUTCOME

Burns & McDonnell Engineering Co. Inc. has over the past two years been using the *Missouri Environmental Geology Atlas — M.E.G.A., A Collection of Statewide Geographic Information System Data Layers, Missouri Department of Natural Resources, 2003.* We have found the Atlas extremely useful for environmental work, especially for our GIS products. The depth of the information included with this release goes beyond the typical natural resources information available from other public sources, and we are able to easily access geologic, water well, and hydrology information about our sites that are within the state of Missouri. The bedrock information in MEGA is typically reconnaissance-grade mapping but has been replaced in some quads with STATEMAP-supported geologic mapping. This detailed geologic mapping is extremely useful and usable. The benefits derived are better mapping products and analytical results for our clients and better environmental planning for the state of Missouri.

Sincerely,
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